Amendment Dated August 20, 2004 - Response to Office Action of April 21, 2004

II. Information Disclosure Statements

Paragraph 1 of the Office Action states that references supplied in several Information

Disclosure Statements were not considered "because [they] do not include a concise statement of
the relevance ... of each patent listed that is <u>not</u> in the English language."

The Office Action gives no explanation for the failure to consider the references that <u>are</u> in the English language. No statement of relevance is required for English references. Applicant requests that all English language references cited on the enclosed IDS and Forms 1449 be considered pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98.

III. Double Patenting

Paragraph 2 of the Office Action is not understood.

The Office Action does not use any of the approved form paragraphs from Chapter 800 of the MPEP. It mixes reasoning and case citations that relate to statutory same-invention type double patenting and obviousness-type double patenting, without indicating which one is thought to apply. Because of the ambiguous statement of grounds, Applicant is unable to determine the appropriate responsive action.

Second, double patenting is an analysis that must be conducted on a claim-by-claim basis. The double-patenting form paragraphs and each subsection of MPEP § 804 require the identification of particular pairs of claims, and a showing that one particular claim in the pending application cannot be literally infringed without literally infringing one corresponding particular claim the other application, and *vice-versa*. For example, MPEP § 804(B)(1) instructs that when making an obvious-type double patenting analysis, the following factual inquiries must be set forth:

- (A) Determine the scope and content of <u>a patent claim</u> [singular] and the prior art relative to <u>a claim</u> [singular] in the application at issue;
- (B) Determine the differences between the scope and content of the patent claim [singular] and the prior art as determined in (A) and the claim [singular] in the application at issue;

A double-patenting rejection may not be based on an unstated mish-mash of many claims.

Because the Office Action never compares a particular claim of this application to a particular

claim of the '401 application, it is impossible to determine which claims the Examiner believes should be cancelled, or terminally disclaimed, in order to cure any rejection.

Third, because of these two failures to clearly state a rejection, no double-patenting rejection exists.

Fourth, Applicant further notes that no double patenting rejection could be raised. For example, each of the independent claims of this application recites one or more of the following limitations:

- recording profile information concerning the execution of the program, the profile information recording of the address of the last byte of at least one instruction (claims 1, 2 and 24)
- ... the program being coded in an instruction set in which an interpretation of an instruction depends on a processor mode not expressed in the binary representation of the instruction; [and] recording profile information ... efficiently tailored to annotate the profiled binary code with sufficient processor mode information to resolve mode-dependency in the binary coding. (claims 1, 34 and 46).

In contrast, none of the independent claims of application serial no. 09/425,401 recite either of these limitations.

Applicant submits that "a clear line of demarcation" has been maintained between the claims of the two applications as requested by the Office Action. No double-patenting rejection is warranted.

IV. Claims 1-33: No Rejections Are Raised Over The Prior Art

Claim 2 recites as follows:

2. A method, comprising:

executing a program on a computer;

recording profile information concerning the execution of the program, the profile information recording of the address of the last byte of at least one instruction executed by the computer during a profiled interval of the execution.

The underlined language is never mentioned in the Office Action; it is simply reduced to an ellipsis. No rejection exists.

The underlined language is absent from the portions of Heisch '033 cited in the Office Action.

Claims 1 and 24 recite similar language, and are likewise not rejected. The claims dependent thereon, 3-23 and 25-33, are similarly not rejected.

V. Claims 34

Claim 34 recites as follows:

34. A method, comprising:

executing a program on a computer, without the program having been compiled for profiled execution, the program being coded in an instruction set in which an interpretation of an instruction depends on a processor mode not expressed in the binary representation of the instruction;

recording profile information describing an interval of the program's execution and processor mode during the profiled interval of the program, the profile information being efficiently tailored to annotate the profiled binary code with sufficient processor mode information to resolve mode-dependency in the binary coding.

Claim 34 recites language that is entirely absent from the Office Action. Claim 34 is not rejected.

Claim 34 recites "an instruction set in which an interpretation of an instruction depends on a processor mode not expressed in the binary representation of the instruction." One typical such instruction set is the Intel X86 instruction set, which has a number of different mode bits. These mode bits dramatically alter the behavior of instructions. For example, a single ADD instruction may add 8, 16 or 32 bits – a single instruction may perform three different operations, depending on the mode. (These modes are described, for example, in the Intel Architecture manuals cited on the accompanying IDS.)

Claim 34 then recites "recording profile information ... to annotate the profiled binary code with sufficient processor mode information to resolve mode-dependency in the binary coding." That is, the profile captures enough information about the mode of an instruction so that it can later be determined which mode applies to this instruction. This information may, for example, be useful to a binary translator, which may need to know whether the instruction should be translated to an 8-bit, 16-bit, or 32-bit operation.

The indicated portions of Heisch '033 have nothing to do with the profiling information recited in claim 34.

Claims 1 and 46 recite similar language, and are similarly not rejected. The claims dependent thereon, 35-45 and 47-55, are similarly not rejected.

VI. Claims 4, 6, 37 and 45

Paragraph 6 of the Office Action states that Heisch and Roediger are combinable "for the same reasons utilized by Y..." The reference to "Y" is not understood. Similarly, it appears that the reasons stated may be "boilerplate" form language, not reasoning particularized to these claims and references.

If any obviousness rejection is thought to apply, Applicant requests the three showings set out at MPEP § 2143-2143.03: motivation to modify or combine, reasonable expectation of success, and every element taught or suggested. Without these three *prima facie* showings, no obviousness rejection can exist.

In view of the amendments and remarks, Applicant respectfully submits that the claims are in condition for allowance. Applicant requests that the application be passed to issue in due course. The Examiner is urged to telephone Applicant's undersigned counsel at the number noted below if it will advance the prosecution of this application, or with any suggestion to resolve any condition that would impede allowance. Enclosed is Petition for Extension of Time for one month. In the event that any extension of time is required, Applicant petitions for that extension of time required to make this response timely. Kindly charge any additional fee, or credit any surplus, to Deposit Account No. 23-2405, Order No. 114596-07-4014.

Respectfully submitted,

WILLKIE FARR & GALLAGHER LLP

Dated: August 20, 2004

David E. Boundy

Registration No. 36,461

WILLKIE FARR & GALLAGHER LLP 787 Seventh Ave. New York, New York 10019 (212) 728-8000

(212) 728-8111 Fax

By: